Data Sheet (Cat.No.TMPY-00349)

TargetMol

Siglec-2/CD22 Protein, Rhesus, Recombinant (His)

General Information

Synonyms: CD22 molecule

Protein Construction: Ser20-Arg686

Species: Rhesus

Expression Host: HEK293 Cells

Accession: EHH29920.1

Molecular Weight: 76.14 kDa (Predicted); 100-120 kDa (Due to glycosylation)

QC Testing

Biological Activity: Activity testing is not tested. It is theoretically active, but we cannot guarantee it.

Purity: > 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

CD22, or cluster of differentiation-22, is a molecule belonging to the SIGLEC family of lectins. It is found on the surface of mature B cells and to a lesser extent on some immature B cells. CD22 a member of the immunoglobulin superfamily. CD22 functions as an inhibitory receptor for B cell receptor (BCR) signaling. It is also involved in the B cell trafficking to Peyer's patches in mice.

Reference

Tedder TF,et al.(1997) CD22, a B lymphocyte-specific adhesion molecule that regulates antigen receptor signaling. Annu Rev Immunol. 15: 481-504.
Tedder TF,et al.(2005) CD22: a multifunctional receptor that regulates B lymphocyte survival and signal transduction. Adv Immunol. 88: 1-50.
Fujimoto M,et al.(2007) B cell signaling and autoimmune diseases: CD19/CD22 loop as a B cell signaling device to regulate the balance of autoimmunity. J Dermatol Sci. 46(1): 1-9.
Walker JA,et al.(2008) CD22: an inhibitory enigma. Immunology. 123(3): 314-25.
Nitschke L. (2009) CD22 and Siglec-G: B-cell inhibitory receptors with distinct functions. Immunol Rev. 230(1): 128-43.

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